

## **REMARKS**

Claims 1, 10 - 11, 14, 17, 19 -20, and 24 -25 are amended. New claims 30 - 32 are added. Now in the case are claims 1 and claims 3 - 32, of which claims 1, 21 and 29 are independent.

### **Request for Two-Month Extension of Time**

Applicants hereby request a Two-Month Extension of Time pursuant to 37 CFR 1.136(a) to respond to the outstanding Office Action, extending the time for reply to June 28, 2004. Applicants qualify as a Small Entity, and understand that the fee for the Two-Month Extension of Time is \$210.00. Authorization is granted to charge this Small Entity fee and any underpayment thereof to Deposit Order Account No. 50-2343.

### **Supplemental Information Disclosure Statement (IDS)**

Applicants submit a Supplemental IDS with this Response and Amendment under separate cover with this Response and Amendment. Applicants understand that a Small Entity fee of \$180 is due in conjunction with the filing of the Supplemental IDS. Authorization is hereby granted to charge this Small Entity fee and any underpayment thereof to Nufern Deposit Order Account 50-2343.

The Examiner is requested to return to Applicants with the next official communication from the USPTO an initialed copy of the PTO Form SB/08 (Parts A and B) of the accompanying Supplemental IDS.

### **Claim Objections**

Claim 3 is objected to under 37 CFR §1.75(c) for failure to further limit the subject matter of a previous claim. The Examiner notes that claim 3 recites the

second fiber being in the shape of circular loop, and contends that this limitation is recited in claim 1, from which claim 3 depends.

Applicants note that claim 1 does not include the word "circular". Accordingly, it is respectfully submitted that claim 3 further defines claim 1 by reciting additional detail regarding the shape of the loop and hence fully conforms with 37 CFR §1.75(c).

Reconsideration and withdrawal of the objection is respectfully requested.

#### **Claim Rejections under 35 U.S.C. § 112**

Claims 1 and 3-28 are rejected under the second paragraph of 35 USC §112 as indefinite due to the recitation of the term "predetermined wavelength".

Claim 1 is amended to redact the term "predetermined." Claims 410 - 11, 14, 17, 19 -20, and 24 -25 are amended to maintain proper antecedent basis with claim 1 in light of the foregoing amendment or to address the Examiner's concerns regarding the term "predetermined wavelength".

It is clear that the foregoing amendments in no way narrow the scope of the patent or amended claims. Although Applicants consider that the amended claims were not indefinite prior to the foregoing amendment, proper antecedent basis can be maintained without the word "predetermined" and Applicants can accommodate the Examiner.

#### **Claim Rejections Under 35 U.S.C. § 102**

##### **Claims 1 and 3 - 20**

##### **Chang et al. '965**

Claims 1 and 3 -20 are rejected as anticipated under §102(e) by Chang et al. '965. Claim 1 recites that "said loop of said second fiber comprising a fiber Bragg grating capable of substantially reflecting energy at a wavelength" and is

now amended to recite that “the first fiber is devoid of a reflector substantially reflecting energy at the wavelength.”

Chang et al. fails to anticipate claim 1 as amended. Figure 3 of Chang et al. '965, relied upon by the Examiner, clearly teaches a first fiber having the reflector 31 (a Sagnac loop mirror) that is clearly within the meaning of “substantially reflecting energy” at a wavelength and a second fiber having the fiber Bragg grating 33, where the grating 38 is also with the meaning of “substantially reflecting” energy at the wavelength. See FIGURE 4A, indicating the reflector 31 reflects at the 2S wavelength, which is the reflection wavelength of the fiber Bragg grating 33, as indicated generally at column 7 of Chang et al. '965. See, for example, column 7, lines 48 - 52. Accordingly, Chang et al. '965 fails to anticipate the invention as now recited in claim 1.

Accordingly, reconsideration and withdrawal of the rejection of claim 1 as anticipated by Chang et al '965, as well as the rejection of claims 3 - 20, which depend, directly or indirectly, on claim 1, is respectfully requested.

No new matter is added. Support for the amendment of claim 1 is found throughout the present application. See, for example, page 7 of the application as filed as well as FIGURES 1 - 3 and 5 - 6. For example, the aforementioned FIGURES clearly include the element indicated by reference numeral 150. Reference numeral 150 is alternatively referred to on page 7 as a “grating” (bottom of the first paragraph) and a reflector (third paragraph). Gratings are continually referred to in the application as “reflecting.” See, for example, the Summary of the application as filed. In addition, one of ordinary skill in the art clearly appreciates that a fiber Bragg grating is a type of reflector. Thus Applicants' teaching that their invention includes a fiber that is substantially devoid of a particular “grating” clearly supports the amended claim 1 reciting that the fiber be substantially devoid of a particular “reflector”. Additional support can be found through the application as filed, including the claims.

Applicants note that the aforementioned amendment to claim 1 does not narrow the scope of claim 1 or of the patent.

Grudin et al.

Claims 1 and 3 - 20 are rejected under §102(e) as anticipated by Grudin et al. (US 2003/0021302). The Applicants present application claims priority to US Provisional Patent Application No. 60/267,252, filed February 7, 2001.

Grudin et al. bears a US filing date of July 12, 2002 and claims priority to US Provisional Patent Application No. 60/306,406, filed July 20, 2001. Both of the foregoing Grudin et al. dates clearly *postdate* the February 7, 2001 filing date of the Applicants' US Provisional Patent Application No. 60/267,252. The Examiner has not indicated that he considers that the pending claims of the present application are not entitled to the February 7, 2001 filing date of US Provisional Patent Application No. 60/267,252.

Accordingly, Grudin et al. is not prior art to the present application and Applicants do not further address the rejection of claims 1 and 3 - 20 as anticipated by Grudin et al. No admission is made that Grudin et al. would anticipate claims 1 and 3 - 20 if available as prior art.

Reconsideration and withdrawal of the rejection of claims 1 and 3 - 20 as anticipated by Grudin et al. is respectfully requested.

Claims 21-28

Claims 21 - 28 are rejected under §102(e) over Grudin et al. For the reasons discussed above in conjunction with the rejection of claims 1 and 3-20, Grudin et al. is not considered prior art against the present application and hence Applicants do not further consider the Examiner's rejection of claims 21 - 28. No admission is made regarding whether Grudin et al. would anticipate any pending claims if Grudin et al. were prior art.

Reconsideration and withdrawal of the rejection of claims 21 – 28 is respectfully requested.

### Claim 29

#### Chang et al. (US2002/0001125)

Claim 29 is rejected as anticipated under §102(e) by Chang et al. (US2002/0001125). As noted above, the Applicants present application claims priority to US Provisional Patent Application 60/267,252, filed February 7, 2001. US2002/0001125 bears a U.S. filing date of June 11, 2001, which clearly *postdates* the February 7, 2001 date of the Provisional Patent Application 60/267,252. The Examiner has not indicated that the pending claims present application are not considered to be entitled to the filing date of US Provisional Patent Application 60/267,252. US2002/0001125 claims priority to KR 2000-32169, filed June 12, 2000. However, the KR filing date is not available under §102(e). See MPEP §706.02(f)(1)I(D).

Accordingly, US2002/0001125 is not prior art to the present application, and Applicants do not further address the rejection of claim 29 over US2002/0001125. No admission is made that US2002/0001125 would anticipate claim 29 if it were prior art.

Reconsideration and withdrawal of the rejection of claim 29 in view of US2002/0001125 is respectfully requested.

#### Putnam et al. (US 6,594,288)

Claim 29 is rejected as anticipated under 35 USC §102(e) by Putnam '288. Applicants respectfully contest the Examiner's assertion that Putnam '288 anticipates claim 29. The Examiner relies upon Figure 7 of Putnam '288 at page 5 of the outstanding Office Action, noting that Figure 7 of Putnam '288 depicts a

first grating pair 51, 61; a second grating pair 52, 62; and a third grating pair 53, 63. However, Applicants note that claim 29 recites the limitation “wherein no grating of the third pair is located between the gratings of the second pair.” Figure 7 of Putnam ‘288 depicts grating 53 of third pair 53, 63 as located between gratings 52 and 62 of the second pair 52, 62. According, Figure 7 of Putnam ‘288 fails to teach specific structure recited in claim 29.

Reconsideration and withdrawal of the rejection of claim 29 over Putnam ‘288 is respectfully requested.

### **New Claims 30 - 32**

New claims 30 - 32 are added. Claims 30 - 32 depend from claim 1 and hence Chang et al. ‘965 fails to anticipate claims 30 - 32 for the reasons noted above.

No new matter is added. Regarding claim 30, which recites that the first fiber is “non-loop shaped”, see, for example, FIGURE 1 and/or FIGURE 3 and the description thereof at page 7 of the application as filed. Regarding claim 31, which recites that “said WDM transfers substantially no energy at said Stoke shifted wavelength from said second fiber to said first fiber and transfers no energy at a different Stoke shifted wavelength having a different order than said Stoke shifted wavelength from said second fiber to said first fiber”, see, for example, page 4, first full paragraph, of the application as filed. Regarding claim 32, reciting the system of claim 1 wherein said first fiber being devoid of said reflector includes said first fiber being devoid of said reflector between said energy source and said WDM”, see, for example, FIGURE 1. Additional support for claims 30 - 32 can be found throughout the application as filed, including the claims.

Authorization is hereby granted to charge Nufern Deposit Order Account 50-2343 for Small Entity fees associated with the filing of new claims.

## CONCLUSION

This Response and Amendment attends to all matters raised in the outstanding Office Action. The application is deemed to be in condition for allowance, and reconsideration and withdrawal of the rejections to the claims, as well as passage to issue, is respectfully requested.

Please do not hesitate to contact the undersigned at the telephone number or email address provided below if such communication can expedite prosecution of the pending application in any way.



---

Peter J. Rainville, Reg. No. 41,263

Nufern

7 Airport Park Road

East Granby, CT 06026

860-408-5022 (phone)

860-408-5080 (fax)

[prainville@nufern.com](mailto:prainville@nufern.com)